

FCS Approach to Embedding Logistics Capability into the System of Systems Common Operating Environment (SoSCOE)

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Integration (FCS/UA)

29 Sep 03

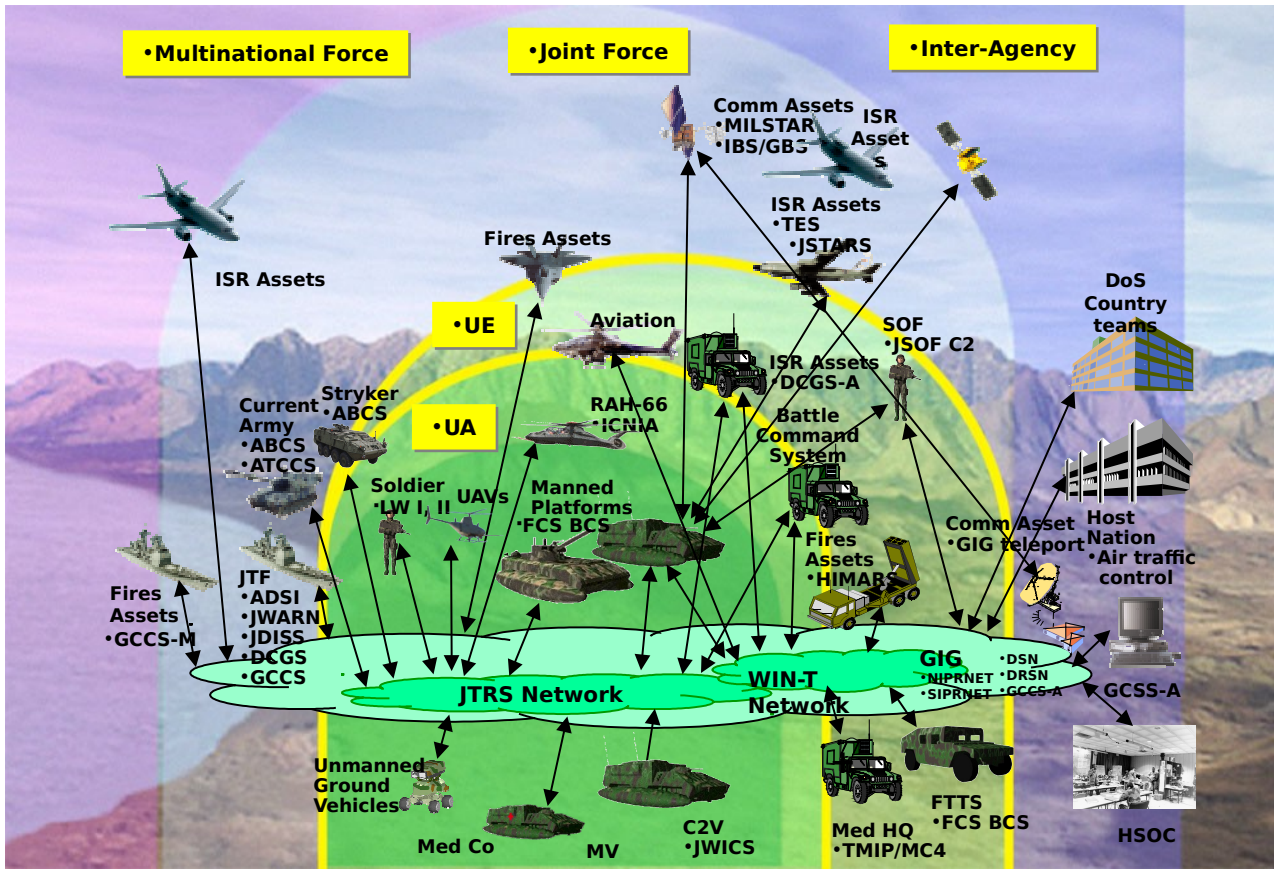
Briefing Outline

- Unit of Action
environment/interfaces
- SoS Integration
- SoSCOE Overview
- How FCS is embracing and
integrating logistics into the System
of Systems Common Operating
Environment

FCS SoS System Interface Description (OV-1)



Objective - An Integrated Unit of Action



- Requirements allocated and derived from an integrated architecture
- Multiple integration objectives
 - Vertical
 - Horizontal
 - KPP Performance
 - U of E
 - PBL eliminates stovepipes
- Capabilities developed, integrated and tested incrementally

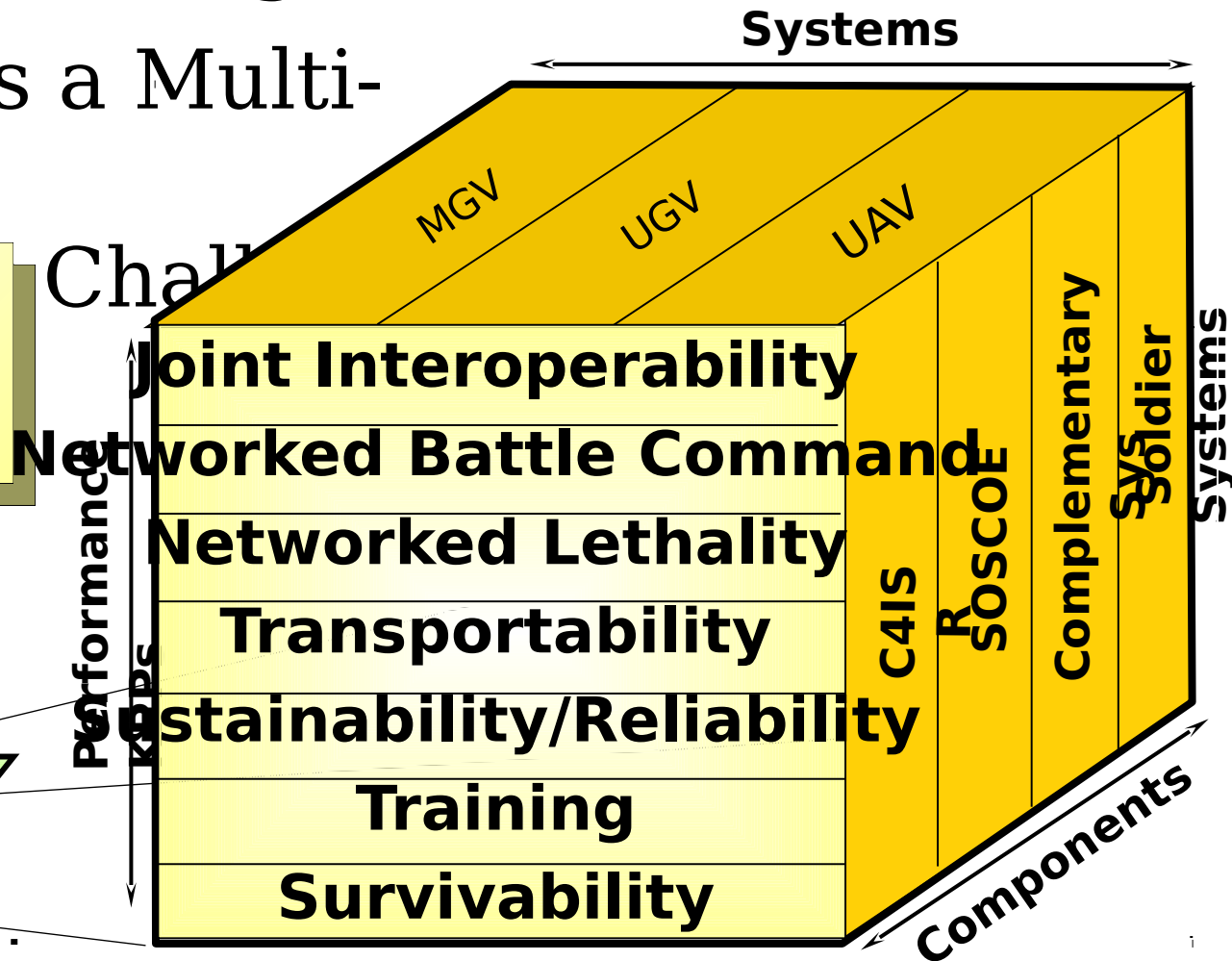
Deliver and Sustain an Integrated Unit of Action (UA) That Is Integrated With the Unit of Employment (UE) and Interoperable With Current Army, Joint Operations and Multi-National Combined Operations

System of Systems Integration

Integration is a Multi-Dimensional

The Challenge is to Optimize all the Integration Parameters

Challenge



Interoperability

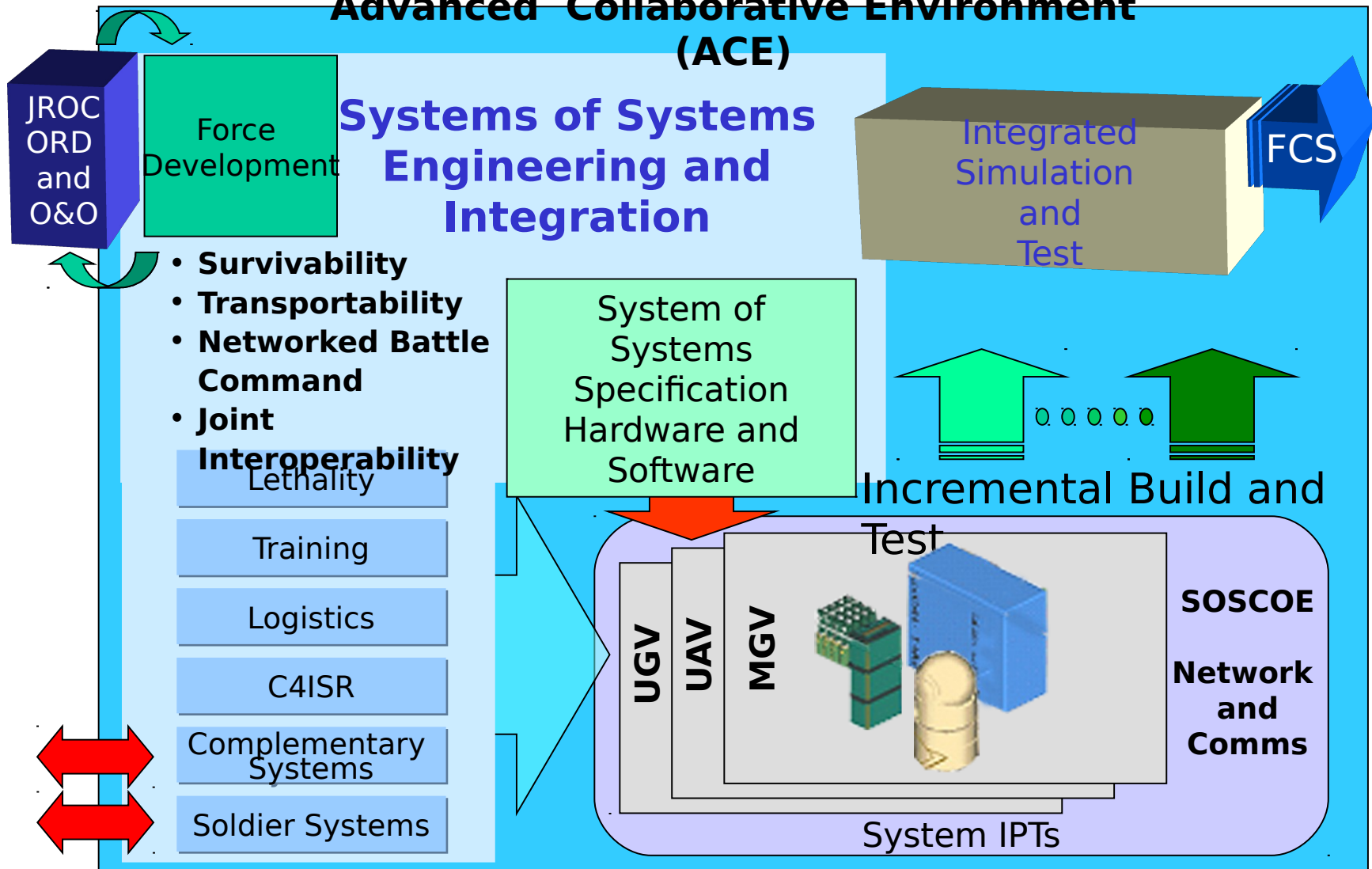
U of

Joint & Combined

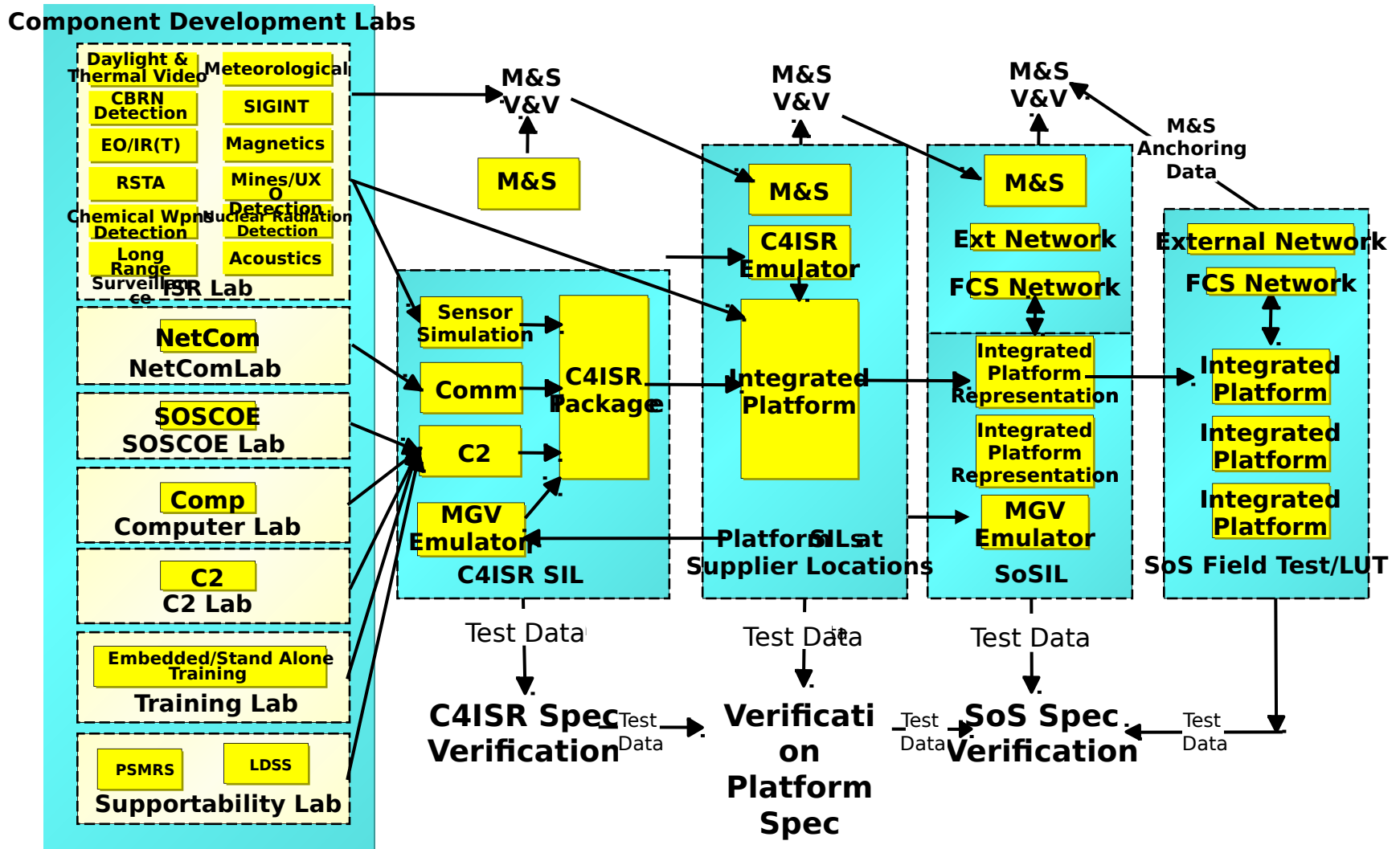
Integrated Design for System of Systems

Organized for System of Systems Integration

Advanced Collaborative Environment (ACE)

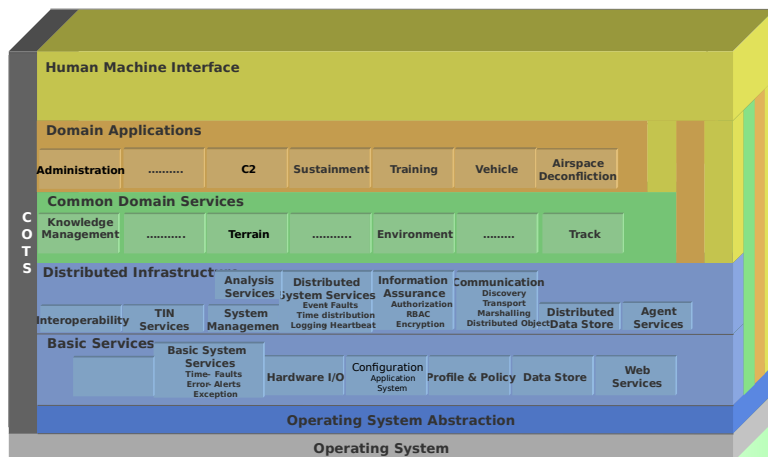


Integration Strategy



SOSCOE Overview

Implementation Reference Model Version 1.5



- C4ISR
- **Sustainment**
- Training
- Manned Ground Vehicles
- Unmanned Air Vehicles
- Unmanned Ground Vehicles
- Soldier Systems

Domain Applications

SOSCOE

Operating System

Network Foundation

Service Families

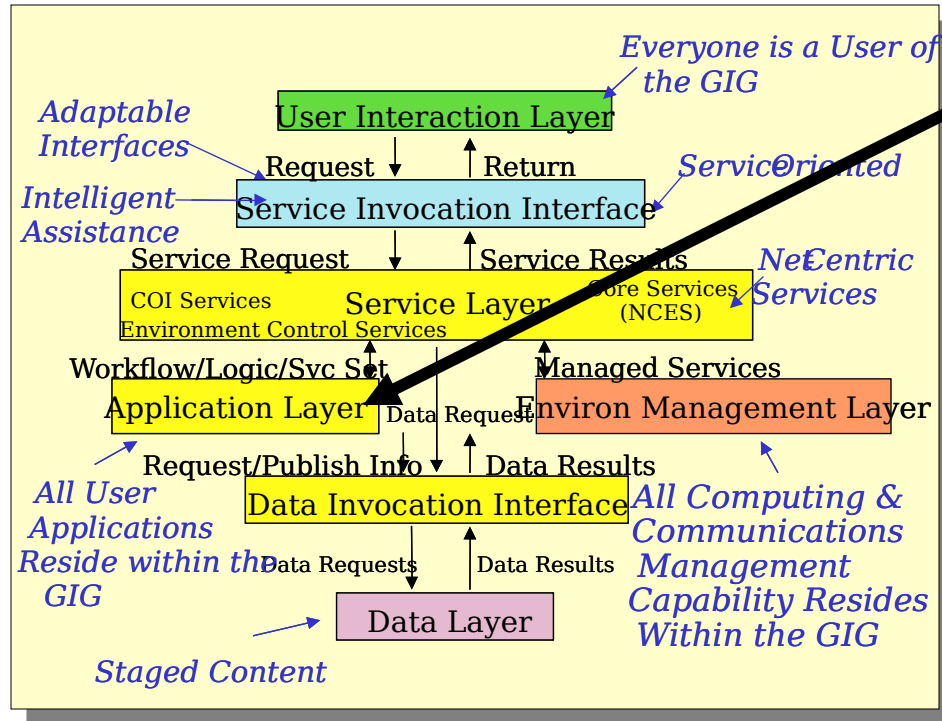
- Administrative services
- Knowledge services
- Information services
- Communication services
- Data store services
- Information assurance
- Interoperability
- System management services
- Analysis services
- System services
- Configuration and control
- I/O services
- Web services
- User profile and policy services

- Working closely with OSD and DISA for GIG and Network-Centric Operations Warfare Reference Model compliance

SOSCOE is composed of a series of service families

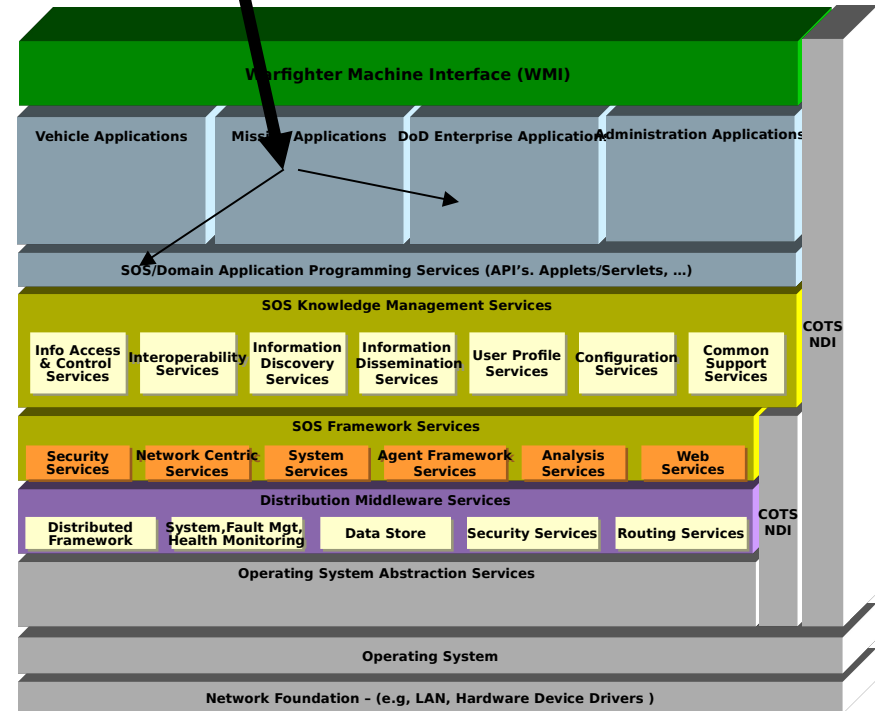
NCOW RM and SOSCOE

RM

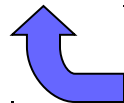


Logistics Applications reside here

SOSCOE Implementation Reference Model v1.5

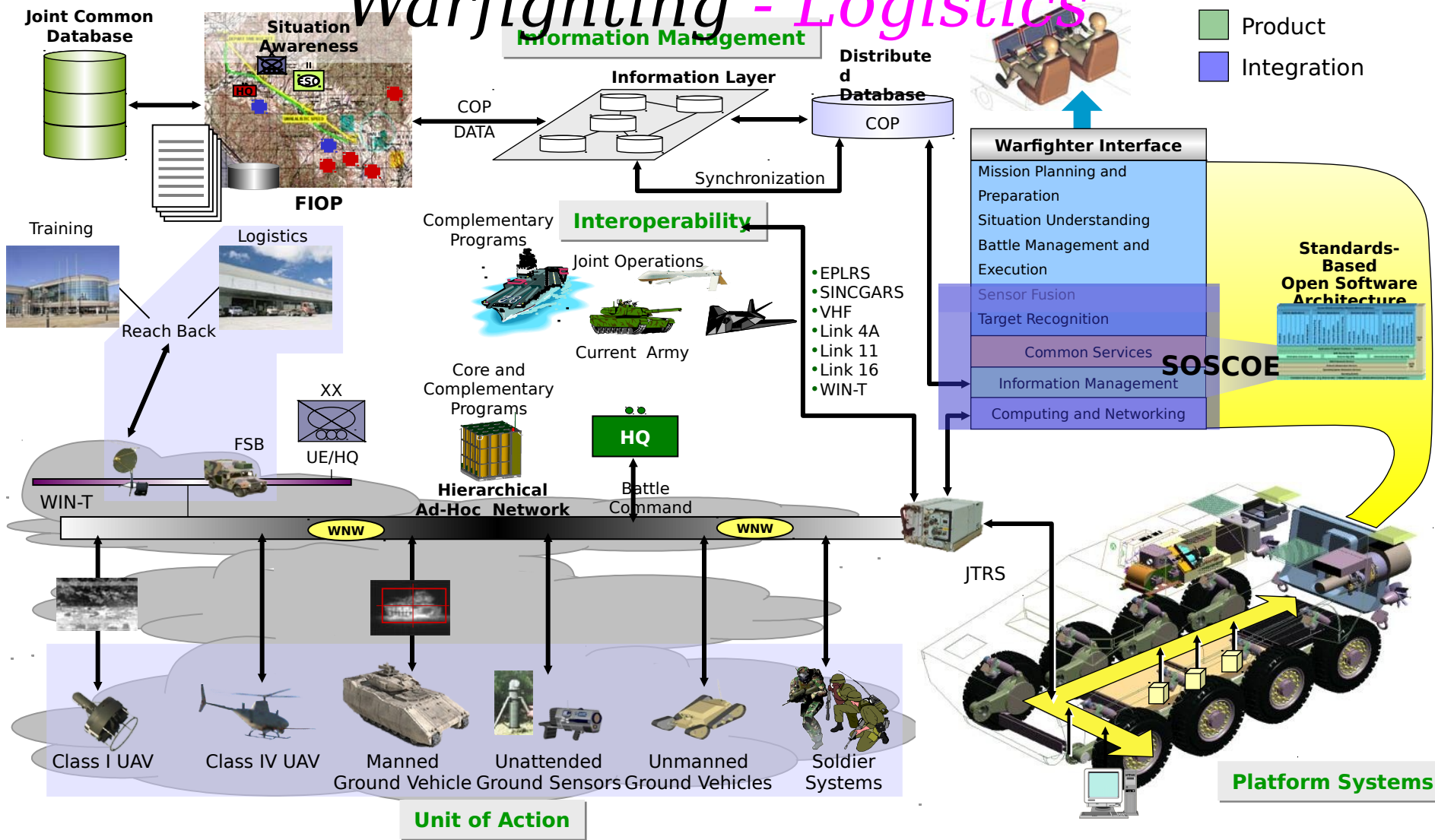


Network Centric Operations Warfare Reference Model



Program Working Closely With OSD and DISA for GIG and NCES Compliance

The Integrated - Interoperable U of A Network-Centric Warfighting - Logistics



Logistics Integrated Responsibilities and Integration Products

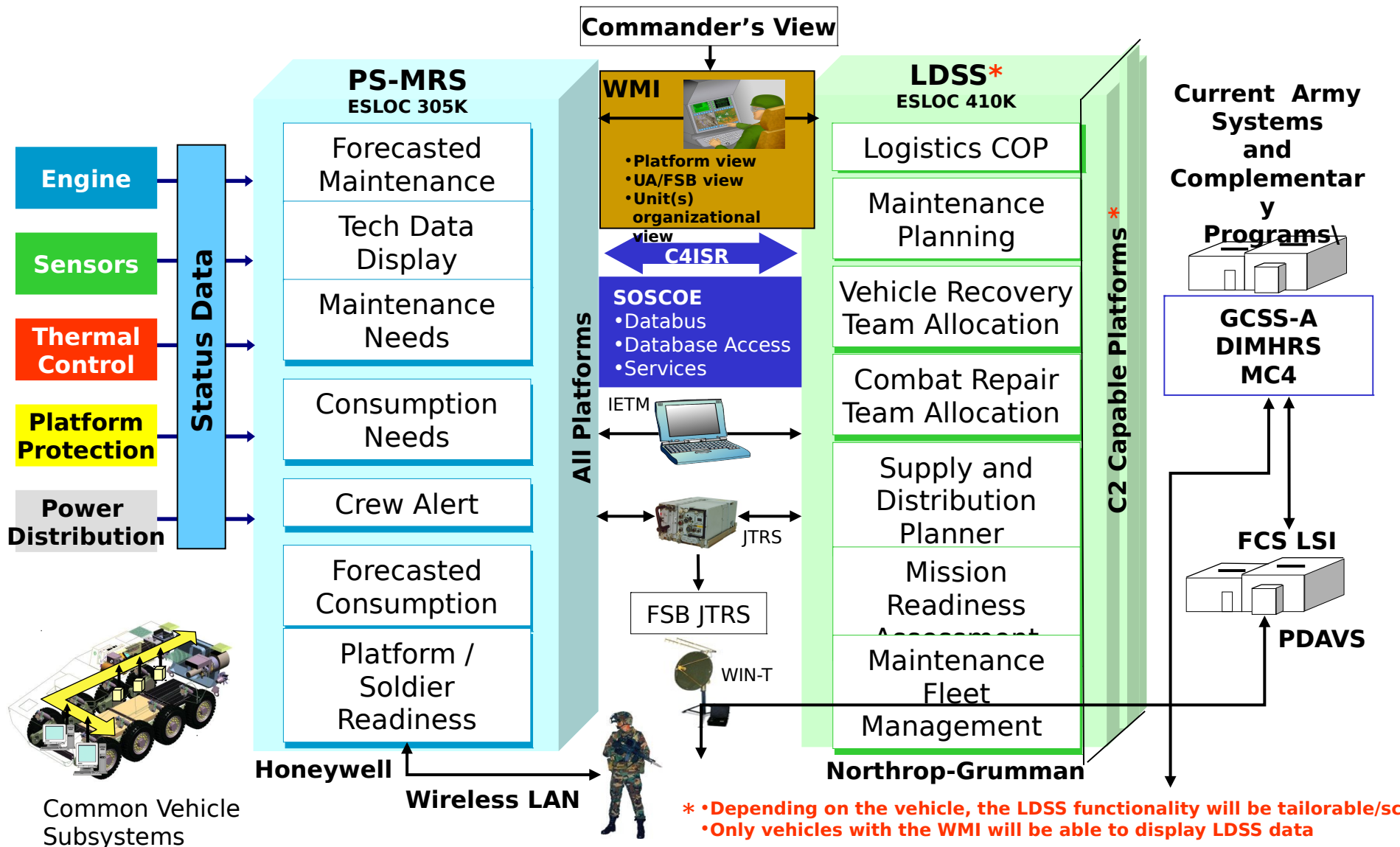
- System of Systems Supportability Integration
 - Logistics Aspects of SoS Architecture
 - Operational and Systems
 - Flow down requirements to all suppliers
 - Data interfaces supporting supplier RAM improvement
 - Hardware / data interfaces supporting UA logistics situational awareness
 - Hardware / data interfaces supporting soldier's view of weapons system health in operation
 - Supportability Test and Evaluation
 - Integrate Logistics across IPTs in support of SSEI
- Development of Logistics Products
 - Hardware: Integration kits for two FTTS and one FRMV ILO vehicles
 - Software: Logistics Decision Support System LDSS (Northrop Grumman), Platform Soldier – Mission Readiness System PS-MRS (Honeywell), IETM, Logistics Data Repository
- Sustainment Planning and UA Supportability Strategy
 - Performance Based Logistics
 - Supply Chain Management
 - Fielding Planning
 - Log Analysis
 - Log Modeling and Simulation

**Key Metrics: Operational Availability, Reduced Footprint,
Lower Life Cycle Costs**

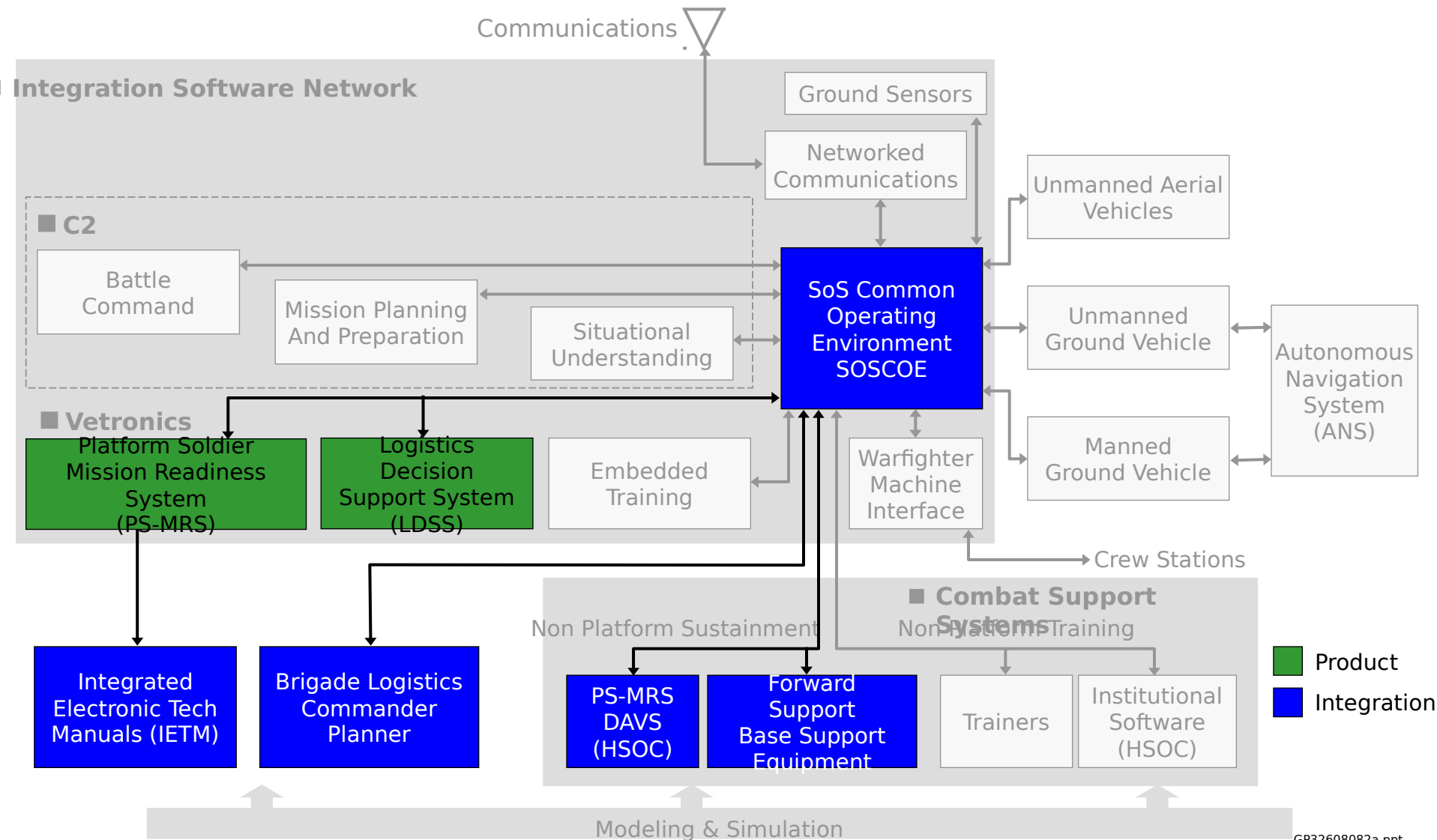
Logistics Integrated Responsibilities and Integration Products (continued)

- Ensure ORD logistics requirements are implemented in the design process through all IPTs
 - High reliability
 - Reduced maintenance ratio
 - Self loading supplies
 - Preconfigured loads
 - Water generation and fuel efficiency
 - Prognostics/diagnostics
 - Crew Chief repair
 - Deployability/Assess Transportability
 - Commonality/modularity
- Develop enabling processes to achieve sustainability goals
 - PBL, Supply Chain Management
- Deliver products to platforms to support log processes and situational awareness - LDSS PS-MBS IETM

Logistics Products Support Processes

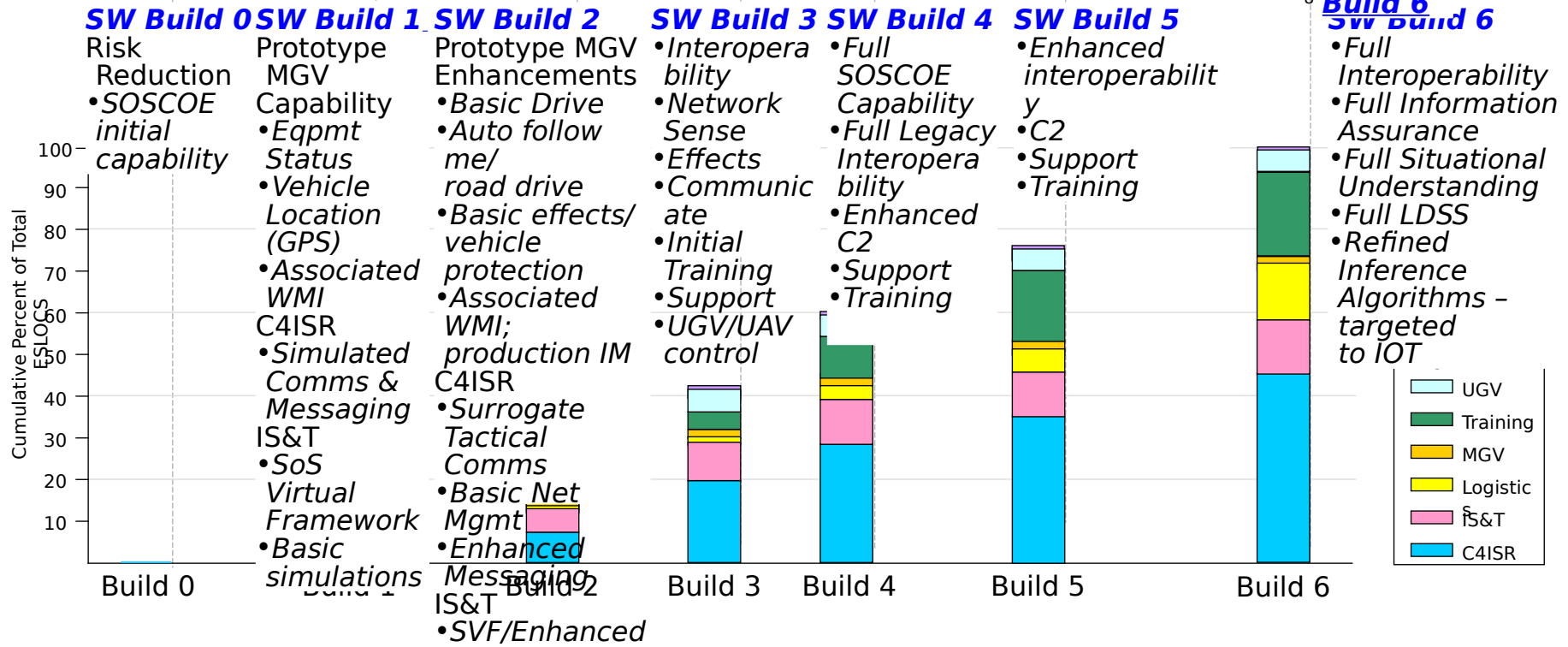
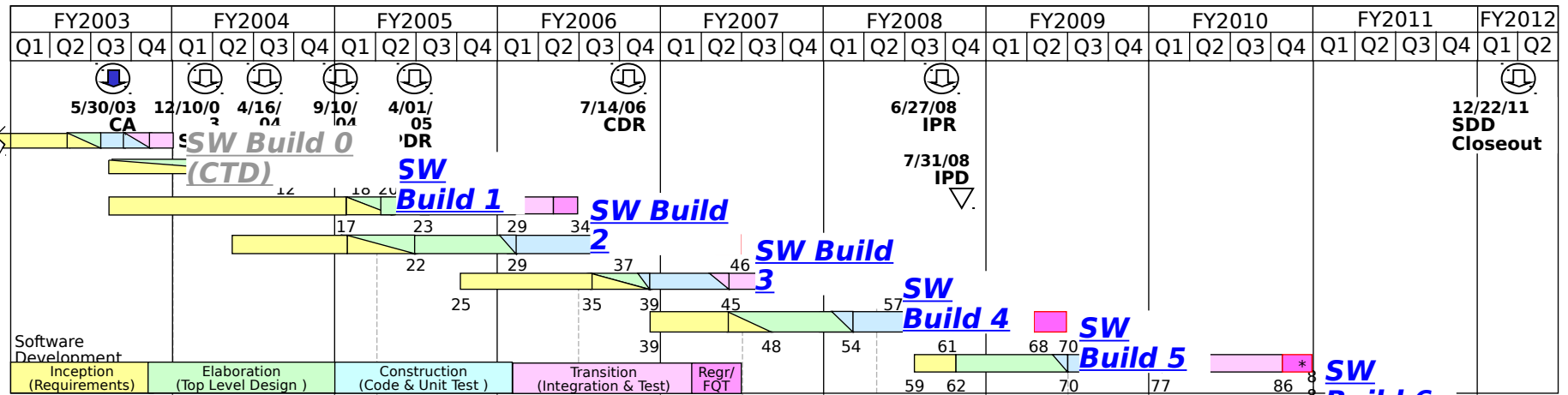


Logistics Software Products and Interfaces



SDD Software Build Baseline

Cumulative Percentage by Build



BACKUP

Tier 1 Master Schedule

